REMARKS

Applicants thank the Examiner for her careful review of the present application.

Claims 1-129 remain pending. The claims have not been amended, and have been reproduced for the convenience of the Examiner. Any discrepency between the claims as currently listed and as listed in the previous response is unintentional, and will be corrected if brought to the attention of Applicants' representative.

Rejections of the Independent Claims under 35 U.S.C. §102(e)

Each of the independent claims in this application (claims 1, 32, 63, 94, 98, 101, 106, 110, 113, 118, 122, and 125) have been rejected under 35 U.S.C. §102(e), as being anticipated by United States Published Application No. 2004/0001194 (Wilstrup). For the reasons presented below, Applicants respectfully traverse the rejection of these claims.

In the previous response, Applicants argued that Wilstrup fails to teach a "deconvolution process," as required by each of the independent claims. Applicants maintain this position, and respectfully request the reconsideration of this issue.

By way of background, Applicants point out that convolution is a method by which two probability density functions (PDFs) may be combined into a single PDF. Thus, for example, a first PDF (PDF #1) may be convolved with a second PDF (PDF #2), to create a third PDF (PDF #3), as shown in the Figure 1, below.
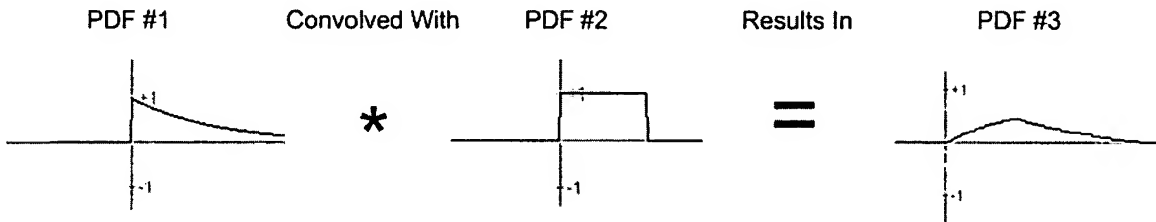

Figure 1.

Deconvolution refers to a process of separating a pair of PDFs that have been combined by convolution. To carry on with the example of Figure 1, a deconvolution process begins with the third PDF (PDF #3), and one of the first two PDFs (PDF #1 or

PDF #2) to arrive at the other PDF. For example, PDF #3 deconvolved by PDF #2 results in PDF #1, as shown in Figure 2, below
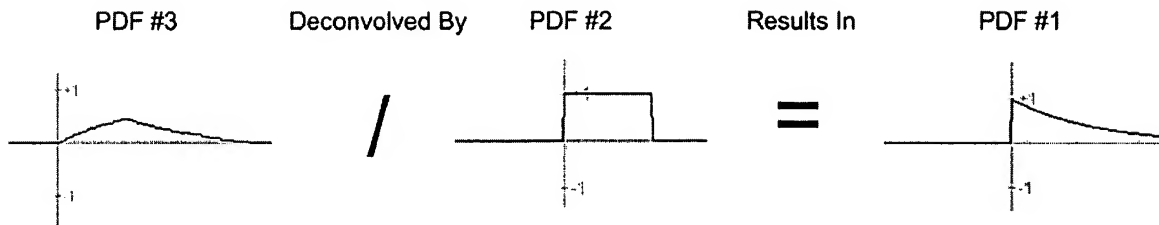

Figure 2.

Applicants point out that the process of deconvolution requires the presence of two PDFs: (1) the combined PDF that is to be uncombined through deconvolution, i.e., PDF #3; and (2) one of the original PDFs, i.e., PDF #2.

Turning to Wilstrup, the Examiner has taken the position that the following passage (found in paragraph 37) teaches deconvolution:

> The optical analyzer 210 may separate the deterministic and random components of the jitter. A PDF for the deterministic component and an rms value for the random component can be obtained. Additional information regarding methods of determining jitter are disclosed in co-pending application Ser. No. 09/240,742 [], assigned to Wavecrest Corporation, which [is] hereby incorporated by reference.

Applicants point out that this passage says only that an analyzer may "separate" the various components of jitter (i.e., may separate a PDF describing total jitter into two PDFs—one describing jitter due to random influences, and another describing jitter due to deterministic influences). This passage does *not* state the process by which the separation may occur. More specifically, Wilstrup does not discuss or teach deconvolution. Applicants note that there are strategies other than deconvolution for separating a combined PDF into its constituents—it is to these other strategies to which this passage refers.

For example, the application referred to in the aforementioned passage (now U.S. Patent No. 6,356,850) teaches a strategy that does not involve deconvolution. The strategy taught therein separates out periodic jitter (a species of deterministic jitter) by identifying "spikes" in a Fast Fourier Transform of variance data acquired by a scheme

taught in the '850 patent. For example, an FFT according to the scheme taught in the '850 patent appears as shown in Figure 3, below.
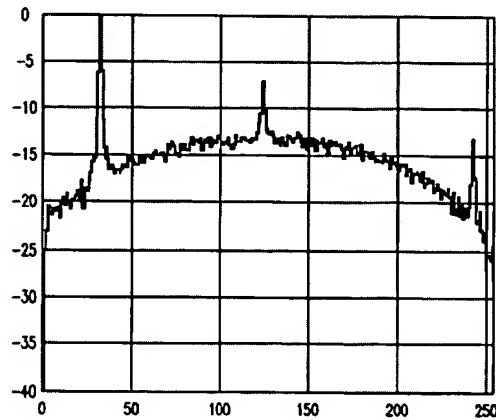

Figure 3.

The '850 patent teaches using a false alarm filter to identify the spikes, and to isolate them. The output of the false alarm filter is shown in Figure 4, below.
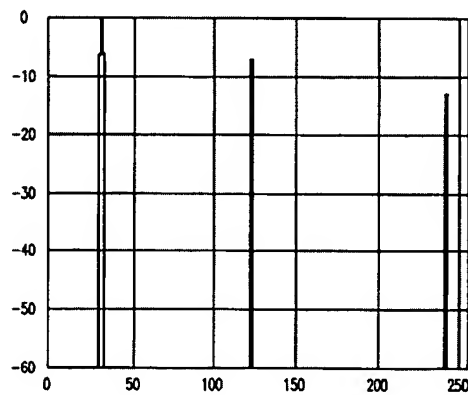

Figure 4.

The '850 patent goes on to teach that an estimate of the periodic jitter is the algebraic sum of the spectral line densities shown in Figure 4.

As can be seen from the foregoing, the '850 patent teaches a method of separating out periodic jitter that relies upon the spectral characteristics known to be exhibited by periodic jitter. The method taught by the '850 patent does not involve deconvolution,

which is a process carried out between two known PDFs, in order to find a third hitherto unknown PDF.

The import of the foregoing is that the Examiner is unjustified in assuming that paragraph 37 of Wilstrup discloses, or is otherwise referring to, deconvolution. That paragraph is, in fact, referring to *another method* by which deterministic and random forms of jitter may be separated. Wilstrup does not even hint at the notion of deconvolution.

Because each of the independent claims requires "a deconvolution process," and because Wilstrup fails to explicitly or inherently disclose deconvolution, it is improper to reject the independent claims, as being anticipated by Wilstrup. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection of the independent claims.

Rejection of the Dependent Claims

The dependent claims have been variously rejected under 35 U.S.C. §102(e) and/or 35 U.S.C. §103(a). One premise of these rejections is that Wilstrup teaches a deconvolution process. This premise has been shown to be false. Therefore, these claims are patentable for at least the same reason that the independent claims are patentable. Applicants respectfully request reconsideration and withdawal of the rejection of the dependent claims.
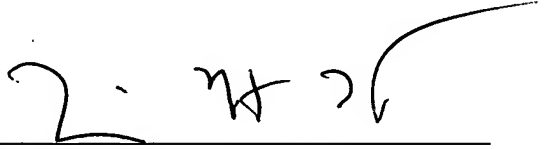
Summary

Claims 1-129 remain pending in this application. Each of these claims is believed to be allowable for the reasons stated herein. This response is believed to be responsive to all points raised in the Office Action. Applicants urge prompt allowance and passage of this application to issuance. If the Examiner believes that discussion of any matter regarding this application is desirable, the Examiner is invited to call the undersigned attorney at the telephone number listed below.

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Respectfully submitted,

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